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NEW AND LITTLE KNOWN PHILIPPINE TRIGLIDS

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The Triglidae described in this paper were collected by the junior author while a member of the Philippine Fishery Program.

Two new species and one previously known from the East Indies and Indian Ocean, but new to the Philippines, are here presented. A fourth species has been collected but once previously. No doubt a study of the trawl catches of Manila Bay and the China Sea immediately outside will reveal more additions to the Philippine fish fauna.

All lengths given are of the standard length. All specimens herein mentioned are in the collection of the School of Fisheries, University of Washington, Seattle, Washington.

Otohime tagala Herre and Kauffman, new species

Dorsal VII-10 or 11; one specimen has a very minute eighth dorsal spine. Anal I-10 or 11; pectoral usually I-11-I, plus 3 detached rays, but may be I-10 to 12-I or II, plus 3 detached rays; ventral I-5. Ten bony shields on each side of the first dorsal, the 2 anterior ones forming a bony buckler around and before the base of the first dorsal spine and separated from the bony occipital plate by a crescent shaped area of naked skin; everywhere else the body is covered with scales, including the pectoral base and preventral area; for an exception see the end of this description. Lateral line tubules 55 or 56, plus 4 more on the caudal base; from 84 to 92 but usually about 86 transverse rows of scales counted immediately above the lateral line; 10 scales between the lateral line and the second dorsal origin. Gill rakers 0 or 1, plus 10 or 12 on the lower arch, the last 2 or 3 rudimentary.

The head and body are laterally compressed, moderately elongate, wedge-shaped, little elevated, the depth 3.85 to 4, the large bone-encased head 2.5 to 2.6, the deeply lunate caudal 3.4 to 3.8, the pectoral 2.2 to 2.4, the longest detached pectoral ray (usually the uppermost) 1.9 to 2, the ventral 3.5 to 3.8 times in the length. The large circular eye equals the snout, 3 to 3.1 in the head, its prominent bony rim smooth; the smooth concave interorbital equals or nearly equals the eye. The short rostral spines are sharp, slender, their outer edges very finely denticulate, 7.25 to 9 times in the head, or 2.4 to 3 times in the eye; the distance between their divergent tips 4.5 to 5.3 times in the head. The mouth is small, the maxillary equal to the eye, extending to a vertical from the front margin of the eye, or slightly beyond. The vomer is toothless, or old specimens may have a few minute teeth; palatines toothless.

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No spines about the eye, nostrils, or preorbital. The conspicuous nuchal spine is usually short, sharp, usually reaching to a vertical from the base of the second dorsal spine, but sometimes not reaching the dorsal origin, 1.1 to 1.5 in eye. Opercular spine very long, sharp, and slender, extending to a vertical from the base of the fourth to sixth dorsal spine or beyond, 1.8 to 2.7 times in the head. Two pre-opercular spines, the upper one sharp and distinct, with a small and inconspicuous one just below it; the humeral plate with a small to very small flat spine, 2.5 to 3.5 times in the eye, or 7.75 to 10 in the head.

First dorsal spines slender with very sharp tips, the first spine 2.1 to 3, the third spine 1.7 to 1.8 times in the head; when depressed the fin reaches or nearly reaches the second dorsal; the rounded tip of the elongate pectoral extends to a vertical from the base of the fifth to the seventh anal ray; the longest detached pectoral ray extends opposite the base of the seventh to the last anal or second dorsal ray; the ventrals extend to the anus or beyond; the caudal is deeply lunate, with

pointed tips.

The color in preservative is uniform reddish brown, the belly, preventral, and prepectoral areas more or less bluish gray to whitish, the head more or less reddish yellow; small dark brown spots are scattered over the upper half of the body, from behind the eyes to the caudal peduncle; a few vague dark brown spots on the spinous dorsal and a median longitudinal row of dark brown spots on the second dorsal rays; the inner surface of the pectoral is dusky or blackish except between the two lowermost rays, with some pale or white spots on the membranes of the 3 lower dusky rays; free pectoral rays white; other fins not pigmented.

Here described from the type, 93 mm. long, and 3 paratypes 80 to 94 mm. in length, taken from outer Manila Bay, in 64 fathoms; one paratype 91 mm. long, from the south entrance to Manila Bay off the Cavite Province coast in 54 fathoms; and 5 paratypes 78 to 98 mm. in length from the China Sea near Fortune Island, off the coast of Batangas Province, at 65 fathoms.

We place with the above two specimens diverging in several particulars. The head is broader, the snout longer, and the mouth decidedly larger; the maxillary extends to a vertical from the front of the pupil or to its center; the pectoral is longer, reaching to the base of the eighth anal ray; the preventral region is naked, with no trace of scales. The color is darker and the spots, particularly in the larger specimen, are much larger, and more numerous. Two specimens 84 and 93 mm. in length, taken at 65 fathoms in the south entrance to Manila Bay, off the coast of Cavite Province, Luzon.

The specific appelation is based on Tagal or Tagalog, a people of certain provinces of Luzon, and their language.

Lepidotrigla deasoni Herre and Kauffman, new species

Dorsal IX-15; anal 14; 55 to 58 scales in the lateral line, 3 scales above it to the second dorsal origin; 4 or 5 rows of very small predorsal scales; pectoral base and preventral region naked; basal half of caudal scaled.

Depth 3.6 to 3.8, head 2.7, caudal 4.1 or 4.2, pectoral 2.9 to 3 times in the length. The broad snout is about 2.3 in the head; the eye is about 1.5 in the snout or 3.5 in the head; the bony elevated orbital rim has 2 or 3 anterior spines, or these may be absent on one side, and one or two posterior spines are usually present; interorbital space concave, its breadth 4.3 to 4.5 times in the head; a transverse groove directly behind the orbital rim and a conspicuous groove from eye to snout on each side of the preorbital plate. The mouth is small, the maxillary not or barely reaching a vertical from the front margin of the eye; no vomerine or palatal teeth.

The dorsal profile of the wedge-shaped body tapers downward rapidly from the large bony head. Rostral spines horizontal, smooth, flattened, short, less than half an eye-diameter in length, the distance between their tips a little more than an eye diameter, the bony processes holding them finely denticulate. A large suprascapular plate tipped with a sharp spine, its total length about equal to eye; opercular spine of moderate length, its base very broad, almost entirely covering the opercle; humeral spine long, slender, sharp, extending to a vertical from the base of the fourth dorsal spine, equal to the eye, the height of its bony base equal to the total length of the spine. The free pectoral rays shorter than the upper part of the pectoral which reaches to the base of the sixth anal ray.

First dorsal spine 2.2 to 2.3, the second dorsal spine about twice, the third dorsal ray about 3, and the third anal ray about 3.2 times in the head; the least height of the caudal peduncle is 1.4 to 1.5 in the eye.

Twenty-four bony scutes along each side of the dorsal base; the first 3 to 5 are flat and spineless, all the rest with a strong spine; sometimes the anterior scutes are fused so that there seem to be 23 or even 22.

The color in alcohol is brown, darkest on the head, more or less gray on the preventral region; fins more or less concolorous except the pectorals which have their inner surfaces largely blackish, the outer rays all whitish.

Here described from the type, 97 mm. in length, and paratype 87 mm. in length, taken by trawl at 65 fathoms in the south entrance to Manila Bay, off the coast of Cavite Province, and 5 paratypes 80 to 92 mm. in length taken at 34 fathoms 6 miles southeast of Monja Island, in the south entrance of Manila Bay, off Cavite Province, Luzon.

This species is named in honor of Dr. H. J. Deason, Chief of the Office of Foreign Activities, U. S. Fish and Wildlife Service, who has taken great interest in Philippine fish and fisheries and has zealously promoted their study.

Lepidotrigla spiloptera Günther

Lepidotrigla spiloptera Günther, "Challenger" Reports,

Zoology, vol. I, Shore Fishes, p. 42, plate XVIII, fig c, 1880;

Aarafura Sea, Kei Islands.

Weber, Fische Siboga Exped., p. 511, 1913.

Six specimens, 75 to 88 mm. in length were taken at a depth of 30 fathoms in the entrance to Manila Bay. The pectoral reaches to the base of the fourth to the seventh anal ray. Lepidotrigla argyrosoma Fowler has a much longer pectoral, its tip opposite the base of the eleventh anal ray.

Lepidotrigla venusta Fowler

Lepidotrigla venusta Fowler, Proc. U. S. Nat. Mus., vol. 85, p. 103. fig.

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48, 1938; Lingayen Gulf off San Fernando Point Light. La Union Province, Luzon, in 45 fathoms; type 111 mm. long.

Three speciments 83 to 88 mm. in length were taken by the junior author at a depth of 15 fathoms, from Manila Bay. Our examples agree in most respects; one specimen has the dorsal IX-14, anal 14, instead of D. IX-15, A. 15. Our specimens all have a pointed pectoral, with the central rays elongated, instead of the rounded pectoral of Fowler's figure. Likewise our specimens have a lunate caudal with pointed tips.